

### **Fuji IX GP Extra (GC America, Inc.) (Project 07-017) (2/09)**

Fuji IX GP Extra is an enhanced version of the familiar products Fuji IX GP and Fuji IX GP Fast. GC America states that Fuji IX GP Extra is a condensable, high-strength conventional glass-ionomer product that is built on the same formulation as its predecessors but differs in that it contains a more reactive aluminofluorosilicate glass powder component that is said to provide a 2.5-minute setting time, improved translucency, and a six-fold greater fluoride release. Fuji IX GP Extra is indicated for caries control restorations, long-term provisional restorations, minimally invasive measures, and as a high-strength foundation for complex restorations.



#### **Manufacturer:**

GC America, Inc.  
3737 W. 127th Street  
Alsip, IL 60803  
(800) 323-7063  
(708) 597-0900  
(800) 423-2963 FAX  
[www.gcamerica.com](http://www.gcamerica.com)

#### **Suggested Retail Price:**

\$280.00 Fuji IX GP Extra Assortment Starter Package (#43924)

Contains:

- 50 – Capsules (0.4g powder/ 0.12g liquid) 10 each of shades A2, A3, A3.5, B1, and B3
- 1 – Cavity Conditioner (5.7 mL)
- 1 – Fuji Coat LC (5.2 mL)
- 1 – Capsule Applier

\$199.75 GC Fuji IX GP Extra Refill Package

Contains:

- 50 – Capsules (0.4g powder/ 0.12g liquid) of one shade (A2, A3, A3.5, B1, B2, C4) or assorted (10 each of shades A2, A3, A3.5, B1, and B3)

#### **Government Price:**

\$167.90 GC Fuji IX GP Extra Assortment Starter Package (item number and contents as listed above)

\$119.75 GC Fuji IX GP Extra Refill Package (item number and contents as listed above)

#### **ADVANTAGES**

- + Faster setting time than previous Fuji IX GP products
- + Faster development of some physical properties than Fuji IX GP and Fuji IX GP Fast
- + Early viscosity exhibits good flow properties
- + No rinse conditioning agent useful in pediatric treatment situations
- + Simulated environmental storage conditions have no effect on material flexure strength

#### **DISADVANTAGES**

- More expensive than Fuji IX GP and Fuji IX GP Fast
- Less radiopaque than Fuji IX GP and Fuji IX GP Fast

## **SUMMARY AND CONCLUSIONS**

Using infrared and thermal analysis under DECS laboratory testing conditions Fuji IX GP Extra demonstrated a higher reaction rate than Fuji IX GP; however the reaction rate of Fuji IX GP Extra was not influenced by ambient temperature conditions. Other thermal analysis evaluation results suggest that the glass ionomer hydrogel water content demonstrates greater stability at six months after preparation. Although Fuji IX GP Extra demonstrated faster development of physical properties, flexure strength and modulus of Fuji IX GP Extra were found not to be significantly different after 24 hours compared to Fuji IX GP and Fuji IX GP Fast. GC America's change to a more-reactive Fuji IX GP glass powder component resulted in an almost 40 percent reduction in radiopacity as compared to Fuji IX GP; however, Fuji IX GP Extra demonstrates approximately the same radiopacity of enamel. Clinical evaluators did note less working time with Fuji IX GP Extra but reported that the faster setting time could be of benefit during expeditionary and humanitarian treatment missions while the no-rinse conditioner was reported to be advantageous in the treatment of pediatric patients. Overall, Fuji IX GP Extra material viscosity was thought to exhibit good flow during early working time and was reported largely not to adhere to instruments during condensation during the latter stages of working time. Within the scope of care at US Air Force, Army, and Indian Health Service clinics, clinicians did not report a distinct advantage between Fuji IX GP and Fuji IX GP Extra in terms of clinical handling characteristics and esthetics. Fuji IX GP Extra's flexure strength and modulus was not impaired by simulated environmental storage conditions, and the product was evaluated at a deployed location and was found to meet all expeditionary requirements. Because Fuji IX GP Extra is twice the federal cost of Fuji IX GP and Fuji IX GP Fast, clinicians should carefully consider any advantages gained by this new material. **GC Fuji IX GP Extra** is rated **Acceptable** for use in US Air Force dental facilities.